

Volunteer Poster Papers: Volunteer posters are encouraged and will be posted during the symposium for review and discussion. Authors will be present at their posters at the poster session.

Proceedings: A printed copy of the Symposium proceedings will be available to participants at registration. Papers from all invited presentations will be included. Papers of volunteer poster presentations will be published if the author requests (check submission form). In order to allow time for editing and printing of the proceedings, all papers will be due **May 15, 2003**. There will be no guarantee that late papers will appear in the printed proceedings. Volunteer poster titles and author's names must be submitted by May 15, 2003. If volunteer poster information (with or without a proceedings paper submission) arrives late, there will be no guarantee of poster space availability. Instructions to authors are posted on the Northern Great Plains Research Laboratory website: www.mandan.ars.usda.gov

CD-ROM and Related Reprints: A CD-ROM with the proceedings, panel remarks, general discussion, summary remarks, and list of participants will be provided after the Symposium. All participants are encouraged to bring reprints of related research to share at the Symposium. A three-ring binder will be provided to insert reprints and publications.

Field Tour

A field tour is scheduled at the Northern Great Plains Research Laboratory, Mandan, North Dakota. The tour will cover diverse cropping systems research and integrated crop, forage, and livestock systems for the Northern Great Plains.

Registration: Registration fees are \$105.00 US (on or before July 1, 2003) and \$145.00 (after July 1, 2003), which includes a copy of the Proceedings, the Monday evening reception, poster session snacks, three breakfasts and two lunches. An optional pitchfork fondue supper will be available for Wednesday evening for an additional \$20.00 US. Registration instructions are posted on the website: www.mandan.ars.usda.gov

Accommodations: Radisson Inn, 605 E. Broadway, Bismarck, ND, phone: **701-255-6000**. A block of hotel rooms are reserved under *"Dynamic Cropping Systems Symposium"* until July 15th.

Sponsored by:

**USDA-ARS, Northern Plains Area Office,
Fort Collins, CO**

**USDA-ARS Northern Great Plains Research
Laboratory, Mandan, ND**

Great Plains Systems Network

North Dakota Area IV Soil Conservation Districts

A CROPPING SYSTEMS SYMPOSIUM

Phone 701.667.3001 for More Information

**A CROPPING SYSTEMS
SYMPOSIUM**

DYNAMIC CROPPING SYSTEMS

*Principles, Processes,
and Challenges*



**August 4-7, 2003
Radisson Inn
Bismarck, ND**

www.mandan.ars.usda.gov

DYNAMIC CROPPING SYSTEMS: *PRINCIPLES, PROCESSES, AND CHALLENGES*

A **dynamic cropping system** is a long-term strategy of annual crop sequencing that optimizes cropping options and the outcome of production, economic, and resource conservation goals by using sound ecological management principles. The purpose of research in this area is to develop systems that are economically viable, socially acceptable, and environmentally sustainable.

Ref: Dynamic Cropping Systems: An adaptable approach to crop production in the Great Plains, Agron. J. 94:957-961

This symposium will emphasize new and emerging principles, processes, and challenges of dynamic cropping systems, and highlight concepts, theories, methods, etc. over the presentation of data, as well as, accentuate research processes over research products, and promote interactions among Canadian and US researchers.



A CROPPING SYSTEMS SYMPOSIUM

Monday Evening, August 4, 2003

Reception for Symposium, 6:00 p.m., Snacks

Tuesday, August 5, 2003

Welcome Remarks

Will Blackburn, USDA-ARS, Fort Collins, CO

Introduction to Dynamic Cropping Systems as Part of Integrated Agricultural Systems

Jon Hanson, USDA-ARS, Mandan, ND

Session 1 Environmental Awareness: Defining Agroecoregions

Sharon Waltman, USDA-NRCS, Lincoln, NE
Glenn Padbury, Agric. and Agri-Food Canada, Saskatoon, SK

Session 2a Diversity: Soil and Crop Management

Landscapes, Soil and Water Conservation, and Diversity

Gary Peterson, Colorado State Univ., Fort Collins, CO

Fertility, Nutrient Movement Issues, and Diversity

Dwayne Westfall, Colorado State Univ., Fort Collins, CO

Soil Biology and Diversity

Jill Clapperton, Agric. and Agri-Food Canada, Lethbridge, AB

Session 2b Diversity: Pest Management

Disease Management and Diversity

T. Kelly Turkington, Agric. and Agri-Food Canada, Lacombe, AB

Insect Management and Diversity

Owen Olfert, Agric. and Agri-Food Canada, Saskatoon, SK

Weed Management, GM Crops

Bob Blackshaw, Agric. and Agri-Food Canada, Lethbridge, AB

Session 3 Adaptability (Flexibility) and Cropping Systems

Canadian Prairies

Stewart Brandt, Agric. and Agri-Food Canada, Scott, SK

Western USA

Perry Miller, Montana State Univ., Bozeman, MT

Northern/Central Plains USA

Donald Tanaka, USDA-ARS, Mandan, ND

Southern Plains USA

Louis Baumhardt, USDA-ARS, Bushland, TX

Session 4 Poster Session

Wednesday, August 6, 2003

Session 5 Reducing Input Costs

Multiple Enterprises

Patrick Carr, North Dakota State Univ., Dickinson, ND

Reducing Input Costs

Martin Entz, Univ. of Manitoba, Winnipeg, MB

Session 6 Information Awareness

Managing Risk

Elwin Smith, Agric. and Agri-Food Canada, Lethbridge, AB

Dave Archer, USDA-ARS, Morris, MN

Potential Crops for the Future

Steven Cermak, USDA, National Center for Agricultural Utilization Research, Peoria, IL

Crop Sequence Calculator

Joe Krupinsky, USDA-ARS, Mandan, ND

Session 7 Networking

Canadian Soil and Crop Network Overview

T. Kelly Turkington, Agric. and Agri-Food Canada, Lacombe, AB

Western Canadian Long-Term Rotation Research Network

Stewart Brandt, Agric. and Agri-Food Canada, Scott, SK

Great Plains Systems Network Overview

Joe Krupinsky, USDA-ARS, Mandan, ND

GPSN Soil Quality Study

Brian Wienhold, USDA-ARS, Lincoln, NE

Evening Field Tour of the

Northern Great Plains Research Laboratory

Thursday, August 7, 2003

Session 8 Visions for the Future

George Clayton, Agric. and Agri-Food Canada, Lacombe, AB

Mike Jawson, National Program Staff, USDA-ARS, Beltsville, MD

Bob Wright, National Program Staff, USDA-ARS, Beltsville, MD

Session 9 Discussion

Comments from Panel

Mark Liebig, Moderator, USDA-ARS, Mandan, ND

Open Discussion

Summary and Closing Remarks

Jon Hanson, USDA-ARS, Mandan, ND